



May 2006

2006-2007 High-Demand Enrollment Grants

Master Plan Policy Initiative 3: Increasing the number of degrees in high-demand fields

Background

The Higher Education Coordinating Board (HECB) received an appropriation of \$900,000 in the 2006 supplemental state operating budget to increase enrollment in high-demand fields at Washington's regional universities and The Evergreen State College during the 2006-07 academic year.

This is the fourth intermittent appropriation the board has received since 1999 to respond to two related challenges. First, college and university students often are unable to take advantage of educational and career opportunities because enrollment access is limited in certain academic degree fields or programs. Secondly, employers report difficulty in hiring enough qualified graduates from Washington state colleges and universities to fill high-skill job openings.

Again this year, the legislature and governor directed the board to manage a competitive process to distribute the new enrollments. For the first time, the budget did not designate specific fields as priorities for funding. Instead it defined high-demand fields as those in which "enrollment access is limited and employers are experiencing difficulty finding qualified graduates to fill job openings."

Currently, the state does not have a method of defining specific academic or employment fields as high-demand. The challenge is to define or classify high-demand fields while allowing institutions sufficient flexibility to respond to their unique regional needs and rapidly changing employer needs.

The board's *Statewide and Regional Needs Assessment*, published in October 2005, identifies broad academic and employment fields that are in high demand for each region of the state, but generally does not make a direct connection between these broad fields and the specific degree programs that would meet employer needs.

This is the first high-demand funding the board has received since the publication of its *Statewide and Regional Needs Assessment* in October 2005. The needs assessment identified several areas of the state where student participation in higher education is below the state

average. The board gave priority to proposals that could demonstrate an ability to increase opportunities for students from these regions to participate in higher education. As directed in the budget bill, the board established a proposal review committee to evaluate the proposals. This document reflects the recommendations of the review committee. The committee's members are listed in Appendix C.

The committee unanimously recommends that the board fund the seven high-demand projects described below. The proposals will fund an additional 95 full-time equivalent (FTE) students at a total cost of \$889,052.

Key Provisions of the 2006-07 Grants

Eligible Institutions:	Central Washington University Eastern Washington University The Evergreen State College Western Washington University
Eligible Programs:	Undergraduate Degree Programs Graduate Degree Programs Certificate Programs
Funds Available:	\$900,000 of which the board may use up to \$20,000 for administration 80 FTE Average of \$11,000 per FTE
Priority given to proposals meeting High-demand criteria of:	<ul style="list-style-type: none">- HECB's <i>State and Regional Needs Assessment</i>- Technology priorities defined in House Bill 2817- Teaching shortage areas determined by the Office of the Superintendent of Public Instruction- Teaching shortage areas identified by the U.S. Department of Education

Eligible colleges were able to submit multiple proposals. Each proposal was evaluated separately based on the criteria described in the board's Request for Proposals (RFP).

Among proposals judged to be of equal merit, preference was given to proposals with the following desirable attributes:

- Responsiveness to the goal of expanding access and participation in high-demand programs for **all** Washington residents, especially students from segments of the state population that have been historically under-represented in college participation.

- Responsiveness to the goal of increasing participation of students from regions with significantly lower than average college participation, as described in the HECB's *State and Regional Needs Assessment*.
- Partnerships among institutions and/or collaboration with community and technical colleges to improve articulation and transfer for two-year college students in the specific high-demand fields addressed in the proposals.
- Partnerships with private-sector businesses, industrial associations, or other organizations that stand to benefit from the state's investment in the proposed education programs. These partnerships may include contributions of in-kind assistance or donations of funds, equipment, or other resources and activities.
- Sources of additional funding, such as government or industry grants or internal budget reallocations, that are intended to supplement the state high-demand enrollment funds.
- Opportunities for students to gain work experience related to their high-demand fields of study while attending college.

In addition, the review committee agreed to the following shared values, prior to making its recommendations:

- No effort should be made to spread grants among the institutions. Merit alone should determine which proposals are recommended for funding.
- Proposals that serve Washington residents over non-residents or that prepare students for entry-level jobs over advancement in current jobs will better meet the program's goal of economic responsiveness.
- Proposals that consist of individual groups of courses rather than full academic programs, or that include foundation or general requirements courses that could be funded through internal reallocations, should be a lower priority for funding.
- At a minimum, the review committee should recommend proposals that total at least 80 FTE, even if the scope or budget of proposals requesting more than the average amount of \$11,000 need to be further negotiated or revised.

Grant Proposal Process

In response to legislative direction – and in recognition of the need to accurately convey the effect of the budget decisions by the governor and legislature – the HECB employed the following process to administer the new appropriation:

An initial draft of the Request For Proposals was sent to review committee members in late March. HECB staff made changes to the draft RFP based on the committee's comments. HECB staff reviewed the updated version of the RFP with representatives from the institutions to ensure it was workable. The final RFP was issued on April 6, 2006, with proposals due on May 3, 2006.

At the Review Committee meeting on May 11, institutions made brief presentations about each proposal and committee members asked questions directly of the presenters from the institutions. Presentations were made in the morning and committee deliberations were conducted in the afternoon. Deliberations resulted in the review committee recommending proposals that totaled 95 FTE and approximately \$1.0 million. Review committee members asked HECB staff to further negotiate institution budgets to ensure consistency and to bring several proposals closer to the \$11,000 per FTE average. The board's education committee reviewed the recommendations of the high-demand grant review committee on May 15 and voted to forward them to the full board.

Review Committee Findings

Eleven proposals were submitted by the three regional institutions. (The Evergreen State College did not submit any proposals). Appendix A contains a table summarizing all of the proposals received, and copies of the proposals are available for review by contacting the HECB. In total, the institutions requested more than twice as much funding and enrollments as were provided in the supplemental budget. This continues a trend that has occurred in each of the HECB's high-demand competitions and reflects the fact that high-demand offerings are often some of the most expensive programs in the colleges' array of offerings.

The review committee offers the following observations about the 2006 process and suggestions for future high-demand initiatives:

- Overall, the quality of proposals continues to improve, and the review committee extends its appreciation to the faculty and administrators who developed the proposals and responded to the committee's requests for clarification and additional information. In past years, a number of proposals did not meet the minimum requirements of the RFP; this year no proposals were rejected for that reason.
- The HECB received one proposal to convert a high-demand program from self support to state support. Although the proposal clearly demonstrated high demand, the committee was unable to recommend funding for this proposal because it would not add new opportunities for students. The committee determined that it was out of the scope of the high-demand funding.
- The review committee also offered helpful advice to the HECB staff for future high-demand grant competitions, including encouragement to develop uniform standards for calculating tuition collections associated with the proposals. Each proposal was required to demonstrate both the full cost of the proposal and expected tuition collections. High-demand grants are funded for the net cost to the state. Initially, each of the three institutions calculated tuition differently, making it difficult for the review committee to determine an equitable amount of funding for each proposal. HECB staff subsequently worked with the institutions to make tuition collection estimates more consistent among the institutions.

Review Committee Recommendations

Based on its evaluation of the proposals, the review committee recommends the HECB approve the following actions:

1. **Authorize the HECB staff to develop contracts** for the projects proposed by the successful institutions listed in Appendix B and described below; and
2. **Direct the HECB staff to work with the institutions to clarify any unresolved issues** as it develops the contracts and throughout the academic year. In particular, staff should work with the Office of Financial Management and the universities to ensure consistent, accurate tracking of the increases in high-demand enrollment attributable to these projects.

The review committee received 11 proposals from three of the four eligible institutions. Of those, the committee is recommending that seven be funded. The RFP encouraged institutions to aim for per-FTE funding close to the \$11,000 average available because the available funds would not allow for as much variance in cost as in years past. Because the institutions largely adhered to this advice, lower-cost proposals were submitted and a higher number of FTE can be funded.

The review committee's recommendations for proposals to be funded are as follows:

Central Washington University

Organic Chemistry – Recommend funding of 18 FTE and \$186,968

The university will expand upper-division organic chemistry course and laboratory sections at CWU's main Ellensburg campus as well as at its university centers in Yakima and Wenatchee. The Yakima and Wenatchee centers in particular will increase opportunities for students from underserved regions of the state to participate in higher education. In addition, the proposal highlighted the high number of chemistry-related employment opportunities and expanded access to prerequisites for other science degrees.

Washington based companies seeking to employ chemists include those from the chemical, high-tech, aerospace, consulting, medical research, petroleum, and biotech industries. In particular, the proposal provided evidence of high growth in the following industries:

- Biotech and Medical Devices
- Marine Services
- Biomedical Research
- Forest Products
- Agriculture/Food Processing
- Bio-Fuel Development
- Enology/Wine Production

General Studies Social Science – Recommend funding of 25 FTE and 126,480

The university will provide an interdisciplinary bachelor's degree in social science at CWU's Yakima University Center. The proposal focuses on increasing opportunities for students from an underserved region to obtain a bachelor's degree that is responsive to job openings in the region. The General Studies Social Science degree is a flexible program that is applicable to a variety of careers.

Students in the Yakima region are often placebound, and there is no regional public transportation network that would allow students to attend classes at CWU's Ellensburg campus. Participation rates in the area are especially low, as determined by the HECB's *State and Regional Needs Assessment*. The review committee concluded that, given the small number of degree programs currently offered at the Deccio Center in Yakima, offering a more flexible degree would allow the program to serve a greater number of students. A more specialized degree program might limit student interest, while employer demand for college graduates remains unmet and continues to grow.

Yakima is one of only 40 communities nationwide that have been designated as a "Renewal Community" by the Department of Housing and Urban Development, due to its pervasive poverty, unemployment and general distress. These demographic characteristics also predict a significant demand for social services professionals whose work in the community serves both a prevention and an intervention function. These include, but are not limited to, social workers, employment counselors and mental health experts. The General Studies - Social Sciences degree will prepare graduates for entry-level positions in these fields and in human resources.

The review committee also recognized the proposal's commitment to connect students with local businesses and future employers through a cooperative education component of the degree program. The university also plans to provide contracted field experience with business, industry, government, and social service agencies. The proposal included letters of support from the following local organizations, many of whom have expressed interest in entering into cooperative education contracts:

- Pacific Power
- Jundt PMC
- Yakima Country Development Association
- City of Yakima
- Pinnell, Inc.
- South Central Workforce Council
- Picatti Brothers
- Enterprise for Progress in the Community
- Greater Yakima Chamber of Commerce

Eastern Washington University

Communication Disorders – Recommend funding of 9 FTE and \$95,463

The university will increase the capacity of its graduate program in communication disorders. The proposal emphasizes that communication disorders professionals are in particularly high demand in public schools statewide. In *Educator Supply and Demand in Washington State*, OSPI indicated that the demand for speech-language pathologists was greater than any other profession within the support personnel category.

The U.S. Department of Labor estimates that between 2002 and 2012 there will be a 21 percent growth in the need for speech-language pathologists in Washington. In addition to public schools, skilled nursing homes, home health facilities, and pediatric and rehabilitation hospitals also report significant difficulty in finding qualified applicants for position openings in speech-language pathology.

Occupational Therapy – Recommend funding of 8 FTE and \$88,056

The university will increase the capacity of its Masters in Occupational Therapy program and the expansion of clinical internship sites. A waiting list of qualified applicants currently exists. The program offers a “3+2” combined undergraduate/graduate track, as well as transfer programs for community college graduates with associate degrees in occupational or physical therapy. The proposal also notes the regional economic benefits to Spokane’s and Eastern Washington’s health care sector.

OSPI, in its 2004 supply and demand report, found “considerable shortages” exist for occupational therapists serving children throughout the K-12 educational system. Employer demand is high, as evidenced by graduates being offered between \$5,000 and \$20,000 in signing bonuses, as well as moving expenses and tuition reimbursement. The first four graduating classes of EWU’s occupational therapy program currently report 100 percent employment in their practice field. The proposal included letters of support from Educational Service District 101 and Holy Family Hospital.

Physical Therapy – Recommend funding of 10 FTE and \$110,600

The university will increase the capacity of its doctoral physical therapy program, which currently has a long waiting list of qualified applicants. The proposal highlights the 100 percent job placement rate of graduates from EWU’s physical therapy program as well as the regional benefits to Spokane’s and Eastern Washington’s health care sector.

According to the American Physical Therapy Association, job openings for physical therapists in Washington have increased over 500 percent over the last three years. The Department of Labor expects demand for physical therapists to increase dramatically as the elderly population continues to grow, and as the baby-boom generation ages. Advances in medicine are also leading to higher survival rates following accidents, heart attacks, and strokes, which often require physical rehabilitation. The proposal included letters of support from Holy Family Rehabilitation Services and from Robert M. Paull, PT OCS.

Western Washington University

Plastics Engineering Technology – Vehicle Design – Recommend funding of 10 FTE and \$115,510

The university will enhance the WWU's current plastics engineering technology (PET) program by adding a vehicle design option. WWU's PET program is unique in the western United States and successfully utilizes several educational and business partnerships.

This proposal responds to the HECB's *State and Regional Needs Assessment*, which concluded that current degree production meets only 67 percent of the need in engineering. Engineering and technology are also identified as fields of priority in House Bill 2817, which passed during the 2006 legislative session and was signed into law by Governor Gregoire. The PET-VD program places a strong emphasis on composite materials, which would prepare students for careers in Washington's local aerospace, marine, truck manufacturing, and sporting goods industries.

The PET program is guided by an Industrial Advisory Committee consisting of employers from the region, including representatives of C&D Zodiac, Boeing, Hexcel, Nypro, R&D Plastics, Pacific Research Laboratories, Hewlett-Packard, Intel, Vaupell Industrial Plastics, and Pacific Injection Molding.

Secondary Education – Math & Science – Recommend funding of 15 FTE and \$165,975

This proposal aims to increase the number of enrollments in WWU's Master's in Teaching (MIT) program for middle and high school teachers seeking endorsements in math or science. The proposal focuses on the critical shortage of math and science teachers in Washington, Western's record as the largest producer of mathematics and science teachers in the state, and the 100 percent placement rate of WWU's MIT graduates.

According to OSPI's 2004 report *Educator Supply and Demand in Washington State*, mathematics and science consistently top the list of endorsement areas with the greatest shortage of qualified applicants. Of the 34 new mathematics and science teachers graduating from WWU's teacher education programs in 2004-05, 17 were offered teaching contracts before program completion. One hundred percent of graduates of WWU's Master of Teaching in Secondary Education find full-time teaching jobs within one year after graduation.

Math and science were also identified as key shortage areas in K-12 by the HECB's *State and Regional Needs Assessment*.

RESOLUTION NO. 06-11

WHEREAS, The 2006 supplemental operating budget allocated \$900,000 to the Higher Education Coordinating Board (HECB) to contract for 80 full-time equivalent (FTE) students in high-demand fields in fiscal year 2007; and

WHEREAS, Policy initiative #3 of the *2004 Strategic Master Plan for Higher Education* focuses on “increasing the number of degrees in high-demand fields”; and

WHEREAS, Proposals were submitted by representatives from Central Washington University, Eastern Washington University, and Western Washington University; and

WHEREAS, A review committee, composed of representatives of the HECB and Office of Financial Management, and specialists in higher education, labor market, and economic development issues, reviewed the proposals and made funding recommendations; and

WHEREAS, The board’s education committee reviewed and approved the recommendations of the review committee; and

WHEREAS, The education committee has presented, and the board has discussed, the committee’s recommendations;

THEREFORE, BE IT RESOLVED, That the members of the Higher Education Coordinating Board adopt the recommendations of the education committee regarding awards for the 2006-07 high-demand grants.

Adopted:

May 25, 2006

Attest:

Gene J. Colin, Chair

Jesus Hernandez, Secretary

Appendix A

High-Demand Proposals Submitted

Institution	Program	Degree Type	Funding	FTE
CWU	Organic Chemistry	Undergraduate	\$194,634	18
CWU	General Studies Social Science	Undergraduate	\$133,300	25
CWU	Mathematics	Undergraduate	\$154,077	21
EWU	Athletic Training & Exercise Science	Undergraduate	\$160,620	15
EWU	Communication Disorders	Master's	\$95,463	9
EWU	Occupational Therapy	Master's	\$88,056	8
EWU	Physical Therapy	Doctoral	\$110,600	10
WWU	Cell & Molecular Biology	Undergraduate	\$237,920	16
WWU	Plastics Technology – Vehicle Design	Undergraduate	\$152,760	10
WWU	Secondary Education – Math & Science	Master's	\$225,300	15
WWU	Teaching English to Speakers of Other Languages	Certificate/ Endorsement	\$401,520	28
TOTAL			\$1,954,250	175

Appendix B
High-Demand Proposals Recommended for Funding

Institution	Program	Degree Type	Funding	FTE
CWU	Organic Chemistry	Undergraduate	\$186,968	18
CWU	General Studies Social Science	Undergraduate	\$126,480	25
EWU	Communication Disorders	Master's	\$95,463	9
EWU	Occupational Therapy	Master's	\$88,056	8
EWU	Physical Therapy	Doctoral	\$110,600	10
WWU	Plastics Technology – Vehicle Design	Undergraduate	\$115,510	10
WWU	Secondary Education – Math & Science	Master's	\$165,975	15
TOTAL			\$889,052	95

Appendix C

High-Demand Proposal Review Committee Members

The 2006 supplemental budget directed the HECB to “establish a proposal review committee that will include, but not be limited to, representatives from the board, the office of financial management, and economic development and labor market analysts.”

Based on those criteria, the following people were asked to serve on the review committee:

Mark Bergeson	Higher Education Coordinating Board
Diana Ehri	Department of Health
Kyra Kester	Office of the Superintendent of Public Instruction
Debora Merle	Office of Financial Management
Randy Spaulding	Higher Education Coordinating Board
David Szatmary	University of Washington
Marc Webster	Office of Financial Management
Greg Weeks	Employment Security Department
Joann Wiszmann	Higher Education Coordinating Board
Katie Youngers	Higher Education Coordinating Board